

# Truck and Bus Regulation Update

## Impacts of the PM Performance Standards in NOx Attainment Areas

January 22, 2009

California Environmental Protection Agency

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Air Resources Board

# Board Direction

- Report back in January 2009 and provide an update on the impacts of the PM performance standards for vehicles driven exclusively within designated attainment areas

# Board Concerns

- Multiple actions on same vehicle
  - Short term use of retrofits before vehicle replacement
- Emissions occur in rural areas
  - Not near people
  - Minimal localized risk

# Approved Requirements

## Designated Attainment Area Counties

- Any vehicle operated exclusively in attainment areas
- No replacements until 2021
  - 2010 engines 2021-2023
- PM filters 2011-2014
  - 7 to 10 year use
- No mileage limits
- GPS tracking
- Reporting required



Attainment Area Counties - Alpine, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Monterey, Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Trinity, Tehama, and Yuba

# Benefits of Current PM Schedule

- Minimizes localized risk from diesel PM hotspots
- Implements Diesel Risk Reduction Plan
- Consistent ARB policy

# Characteristics of Attainment Areas

- 2 million residents
  - Majority in urban areas
  - Many live near freeways or busy roadways
- 23,000 trucks registered
  - At least 60% are local
- Ratio of residents per truck
  - Same as statewide average of 85
- Majority of trucks in fleets of 3 or less
- Trucks older than statewide average

# Staff Analysis

(Attainment Areas)

- Evaluated localized risk in Eureka/Arcata
- Based on forest product industry
  - Logging trucks (seasonal operation)
  - Mill by-products
  - Forest waste (excluding chippers)
- Limited information on other trucks
  - 500 to 4,000 daily truck trips on main roadways

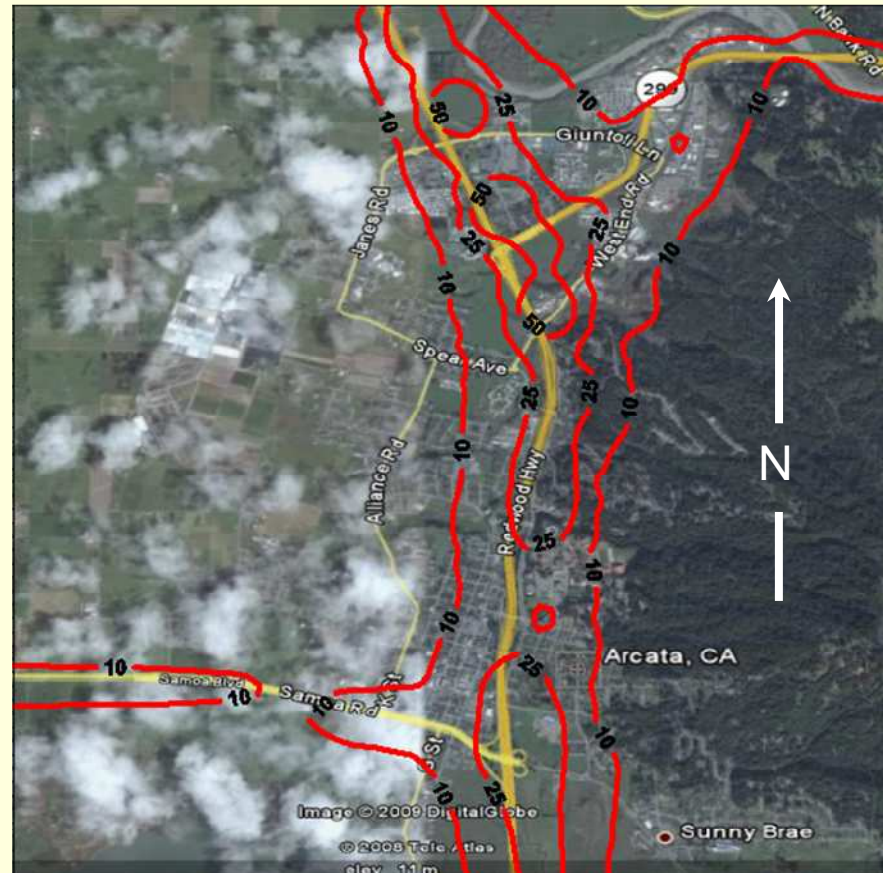
# Wood Processing Trips

(Annual Daily Average)



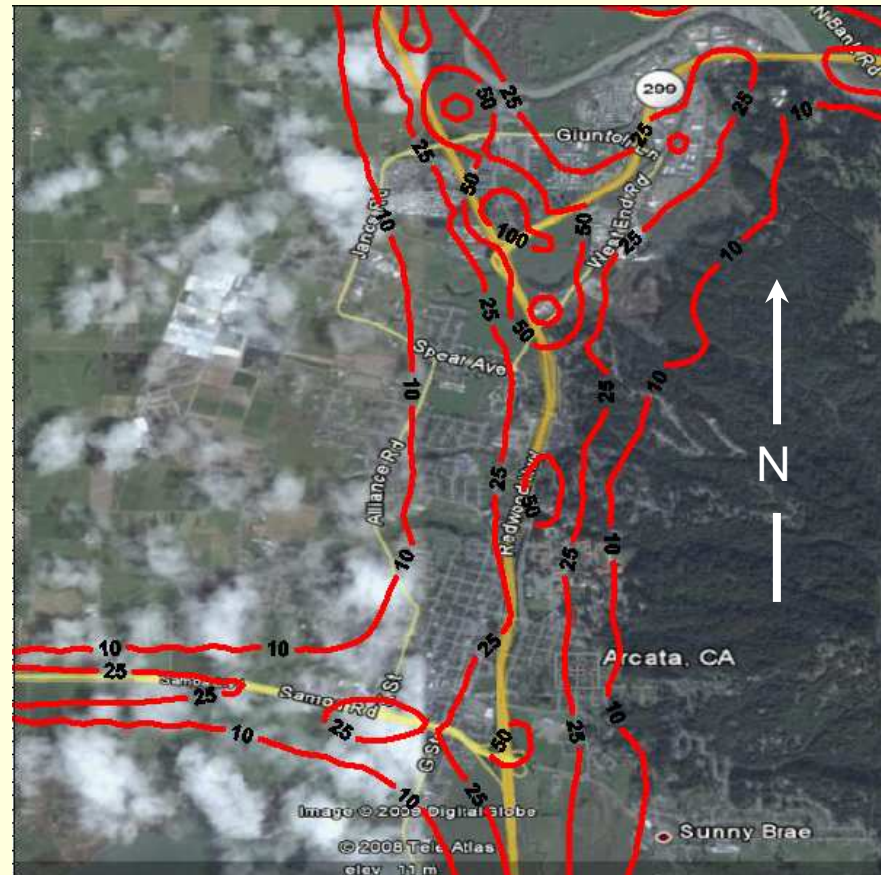


# Incremental Diesel PM Exposure Risk With Approved Regulation



Note: Map shows about 9 square miles.

# Incremental Diesel PM Exposure Risk With Delay for Wood Processing Trucks



Note: Map shows about 9 square miles.

# Conclusions

- Diesel PM hotspots occur in attainment areas
  - Emissions near roadways are significant
- Significant number of residents live in urban areas
  - Percentage of population near roadways similar to statewide levels
- Significant background risk from all trucks